

Recovery Plan Action Status

Plan Name: Recovery Criteria and Estimates of Time for Recovery Actions for the Sonoran Pronghorn: A Supplement and Amendment to the Final Revised Sonoran Pronghorn Recovery Plan

Plan Status: Final Revision 1

Plan Date: 26-Nov-03

Lead Agency: USFWS

Lead Office: Cabeza Prieta National Wildlife Refuge

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387-6483)

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Sonoran pronghorn (Antilocapra americana sonoriensis)	1	1.1	Fawn recruitment	Ongoing Current	FY 1995 - FY 1999	FY 2013	Arizona Department of Game and Fish, Cabeza Prieta National Wildlife Refuge, United States Air Force , United States Marine Corps , Sonoran Pronghorn Recovery Team	Management: General	Species Expert	SOPH telemetry flights by AGFD were resumed in 2005 with the collaring of 2 SOPH in the U.S. Data from these flights is used to estimate fawn recruitment.
Sonoran pronghorn (Antilocapra americana sonoriensis)	1	1.101	Update veterinarian contact	Ongoing Current	FY 1995 - FY 1999	FY 2013	Arizona Department of Game and Fish	Management: General	Species Expert	AGFD contracts each year with a large animal veterinarian with experience with big game species for the SOPH program.
Sonoran pronghorn (Antilocapra americana sonoriensis)	1	1.102	Materials for medical situations and specimen salvage	Ongoing Current	FY 1995 - FY 1999	FY 2013	Arizona Department of Game and Fish	Management: General	Species Expert	cost estimates included in task 1.101 AGFD contract veterinarian supplies the materials.
Sonoran pronghorn (Antilocapra americana sonoriensis)	1	1.103	Notify refuge of fatalities	Ongoing Current	FY 1995 - FY 1999	FY 2013	Arizona Department of Game and Fish, National Park Service, U.S. Fish and Wildlife Service, Bureau Land Management , United States Air Force , United States Marine Corps	Management: General	Species Expert	part of ongoing agency programs, all the cooperating agencies report any sick or dead SOPH immediately to CPNWR and the animals are retrieved as soon as possible.
Sonoran pronghorn (Antilocapra americana sonoriensis)	1	1.11	Viable population estimates	Planned			Arizona Department of Game and Fish, Sonoran Pronghorn Recovery Team	Management: Other	Species Expert	initial population viability analysis completed in 1995 at symposium; model updates periodically to reflect new data

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Sonoran pronghorn (Antilocapra americana sonoriensis)	1	1.2	Habitat enhancement	Ongoing Current	FY 2000 - FY 2004	FY 2013	U.S. Fish and Wildlife Service, United States Air Force , United States Marine Corps	Management: General	Species Expert	Limited funding has slowed the completion of the 10 SOPH forage enhancement projects.
Sonoran pronghorn (Antilocapra americana sonoriensis)	1	1.3	Water investigation	Partially Complete	FY 2000 - FY 2004	FY 2013	U.S. Fish and Wildlife Service, United States Air Force , United States Marine Corps	Work type not yet selected	Labor type not yet selected	Initial work was completed examining the use of water sources for Sonoran pronghorn during the protracted drought in 2001-2002. Results found the placement of waterw was warrented; since then 15 waters have been placed within the U.S. Range.
Sonoran pronghorn (Antilocapra americana sonoriensis)	1	1.4	Predator investigation	Not Started			U.S. Fish and Wildlife Service, United States Air Force , United States Marine Corps	Work type not yet selected	Labor type not yet selected	
Sonoran pronghorn (Antilocapra americana sonoriensis)	1	1.51	Protect present range	Not Started			National Park Service, U.S. Fish and Wildlife Service, Bureau Land Management , United States Air Force , United States Marine Corps	Work type not yet selected	Labor type not yet selected	part of ongoing agency programs

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Sonoran pronghorn (Antilocapra americana sonoriensis)	1	1.52	Investigate preferred habitat	Partially Complete	FY 2000 - FY 2004	FY 2009	Arizona Department of Game and Fish, U.S. Fish and Wildlife Service, Bureau Land Management	Work type not yet selected	Labor type not yet selected	Arizona Game and Fish Department conducted an analysis of suitable Sonoran pronghorn habitat in western Arizona. Suitable areas east of highway 85 were not analyzed in this study; these areas may be analyzed at a later date if there is a need to develop additional reintroduction sites. The results of this analysis has focused our attention in planning and eventually developing a second U.S. population in Western Arizona.
Sonoran pronghorn (Antilocapra americana sonoriensis)	1	1.53	Investigate range expansion	Not Started			Arizona Department of Game and Fish, National Park Service, U.S. Fish and Wildlife Service, Bureau Land Management , United States Air Force , United States Marine Corps	Work type not yet selected	Labor type not yet selected	cost estimates included in 1.52
Sonoran pronghorn (Antilocapra americana sonoriensis)	1	1.6	Livestock; Assess all livestock waters on 4 BLM allotments for Sonoran pronghorn and Complete range assessment of 4 allotments by the BLM and application of standards and guidelines to ensure adequate forage for pronghorn and habitat improvement.	Complete	FY 2000 - FY 2004	FY 2005	U.S. Fish and Wildlife Service, Bureau Land Management	Work type not yet selected	Labor type not yet selected	One grazing allotment has been abolished; all waters (the four described above), have been modified to benefit pronghorn. Competition for forage resources are dramatically reduced within the current U.S. Sonoran pronghorn range.

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Sonoran pronghorn (Antilocapra americana sonoriensis)	1	1.71	Critical use areas on military lands	Not Started			Arizona Department of Game and Fish, United States Air Force , United States Marine Corps	Work type not yet selected	Labor type not yet selected	
Sonoran pronghorn (Antilocapra americana sonoriensis)	1	1.72	Annual review of military activities	Not Started			U.S. Fish and Wildlife Service, United States Air Force , United States Marine Corps , Barry M. Goldwater Executive Council	Work type not yet selected	Labor type not yet selected	
Sonoran pronghorn (Antilocapra americana sonoriensis)	1	1.73	Long-term investigation of military effects on behavior	Partially Complete	FY 2000 - FY 2004	FY 2011	Arizona Department of Game and Fish, United States Air Force , United States Marine Corps , University of Arizona	Work type not yet selected	Labor type not yet selected	Several research studies have been completed including: analyzing the effects of aircraft noise on Sonoran pronghorn; effects of night operations on Sonoran pronghorn; and effects of military chaff on Sonoran pronghorn. If new studies are deemed necessary, we will work with the various agencies to expedite these needs.
Sonoran pronghorn (Antilocapra americana sonoriensis)	1	1.74	Maintain updated MOU between military and USFWS	Not Started			U.S. Fish and Wildlife Service, United States Air Force , United States Marine Corps , Barry M. Goldwater Executive Council	Work type not yet selected	Labor type not yet selected	part of ongoing agency programs
Sonoran pronghorn (Antilocapra americana sonoriensis)	1	1.75	Investigate military contaminants	Not Started			U.S. Fish and Wildlife Service, United States Air Force , United States Marine Corps	Work type not yet selected	Labor type not yet selected	expansion of narrative action 1.7

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Sonoran pronghorn (Antilocapra americana sonoriensis)	1	1.81	Human disturbance - seasonal closures	Not Started			National Park Service, U.S. Fish and Wildlife Service, Bureau Land Management , United States Air Force , United States Marine Corps	Work type not yet selected	Labor type not yet selected	
Sonoran pronghorn (Antilocapra americana sonoriensis)	1	1.9	Effects of disease and parasites;	Partially Complete	FY 2000 - FY 2004	FY 2010	Arizona Department of Game and Fish, U.S. Fish and Wildlife Service, United States Air Force	Work type not yet selected	Labor type not yet selected	One study (investigation of Culicoides spp as a vector for the transmission of bluetongue and EHD to pronghorn) has been completed. Additional research will occur if necessary.
Sonoran pronghorn (Antilocapra americana sonoriensis)	2	2.111	Captive population demographics and genetics	Not Started			Los Angeles Zoo, Sonoran Pronghorn Recovery Team, Phoenix Zoo	Work type not yet selected	Labor type not yet selected	
Sonoran pronghorn (Antilocapra americana sonoriensis)	2	2.112	Captive population size	Not Started			Los Angeles Zoo, Sonoran Pronghorn Recovery Team, Phoenix Zoo	Work type not yet selected	Labor type not yet selected	cost estimates included in task 2.111
Sonoran pronghorn (Antilocapra americana sonoriensis)	2	2.113	Husbandry requirements	Discontinued			Los Angeles Zoo, Sonoran Pronghorn Recovery Team, Phoenix Zoo	Work type not yet selected	Labor type not yet selected	cost estimates included in task 2.111; at this point, this task is not deemed necessary.
Sonoran pronghorn (Antilocapra americana sonoriensis)	2	2.114	Captive space availability	Discontinued			Los Angeles Zoo, Sonoran Pronghorn Recovery Team, Phoenix Zoo	Work type not yet selected	Labor type not yet selected	cost estimates included in task 2.111. At this point, this action is no longer needed. We are raising Sonoran pronghorn in a Captive rearing pen on the refuge. There is no immediate need to house pronghorn in additional locations such as zoos. However, if captive animals become sick or injured, they may be transferred to a zoo.

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Sonoran pronghorn (Antilocapra americana sonoriensis)	2	2.12	Physiologic monitoring	Not Started			Los Angeles Zoo, Sonoran Pronghorn Recovery Team, Phoenix Zoo	Work type not yet selected	Labor type not yet selected	cost estimates included in task 2.111
Sonoran pronghorn (Antilocapra americana sonoriensis)	2	2.13	Hand-raising	Discontinued			Los Angeles Zoo, Sonoran Pronghorn Recovery Team, Phoenix Zoo	Work type not yet selected	Labor type not yet selected	cost estimates included in task 2.111. Due to the success of the captive rearing pen, there are no plans for hand raising pronghorn fawns.
Sonoran pronghorn (Antilocapra americana sonoriensis)	2	2.21	Evaluate reintroduction sites and techniques	Ongoing Current	FY 2005	FY 2010	Arizona Department of Game and Fish, U.S. Fish and Wildlife Service, Sonoran Pronghorn Recovery Team	Work type not yet selected	Labor type not yet selected	Project is ongoing. We are currently developing a plan for the development and implementation of a second Sonoran pronghorn herd to be established in western Arizona.
Sonoran pronghorn (Antilocapra americana sonoriensis)	2	2.22	Habitat criteria for reintroduction	Complete	FY 2000 - FY 2004	FY 2005	Arizona Department of Game and Fish, U.S. Fish and Wildlife Service, Sonoran Pronghorn Recovery Team	Work type not yet selected	Labor type not yet selected	Habitat criteria for reestablishment has been determined.
Sonoran pronghorn (Antilocapra americana sonoriensis)	2	2.23	Public input into reintroduction	Planned	FY 2007	FY 2010	Arizona Department of Game and Fish, U.S. Fish and Wildlife Service	Work type not yet selected	Labor type not yet selected	
Sonoran pronghorn (Antilocapra americana sonoriensis)	2	2.241	Determine predator status at reintroduction sites	Not Started			Arizona Department of Game and Fish, U.S. Fish and Wildlife Service, Bureau Land Management	Work type not yet selected	Labor type not yet selected	
Sonoran pronghorn (Antilocapra americana sonoriensis)	2	2.242	Fencing needs	Not Started			Arizona Department of Game and Fish, U.S. Fish and Wildlife Service, Sonoran Pronghorn Recovery Team	Work type not yet selected	Labor type not yet selected	cost estimates included in task 2.21
Sonoran pronghorn (Antilocapra americana sonoriensis)	2	2.243	Status and availability of preferred forage	Not Started			Arizona Department of Game and Fish, U.S. Fish and Wildlife Service, Bureau Land Management	Work type not yet selected	Labor type not yet selected	cost estimates included in task 2.21

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Sonoran pronghorn (Antilocapra americana sonoriensis)	2	2.244	Water availability at release sites	Not Started			Arizona Department of Game and Fish, U.S. Fish and Wildlife Service, Bureau Land Management	Work type not yet selected	Labor type not yet selected	cost estimates included in task 2.21
Sonoran pronghorn (Antilocapra americana sonoriensis)	2	2.25	Legal aspects of reintroduction	Ongoing Current	FY 2007	FY 2010	Arizona Department of Game and Fish, U.S. Fish and Wildlife Service, Bureau Land Management , Instiuto del Medio Ambiente y el Desarrollo Sustentable de Estatio de Sonora	Work type not yet selected	Labor type not yet selected	part of ongoing agency programs
Sonoran pronghorn (Antilocapra americana sonoriensis)	2	2.31	Transplant herd dynamics	Not Started			Arizona Department of Game and Fish, U.S. Fish and Wildlife Service, Sonoran Pronghorn Recovery Team	Work type not yet selected	Labor type not yet selected	
Sonoran pronghorn (Antilocapra americana sonoriensis)	2	2.32	Review captive techniques	Ongoing Current	FY 2007	FY 2013	Arizona Department of Game and Fish, U.S. Fish and Wildlife Service, Sonoran Pronghorn Recovery Team	Work type not yet selected	Labor type not yet selected	cost estimates included in task 2.31
Sonoran pronghorn (Antilocapra americana sonoriensis)	2	2.33	Transplant holding requirements	Ongoing Current	FY 2007	FY 2013	Arizona Department of Game and Fish, U.S. Fish and Wildlife Service, Sonoran Pronghorn Recovery Team	Work type not yet selected	Labor type not yet selected	cost estimates included in task 2.31
Sonoran pronghorn (Antilocapra americana sonoriensis)	2	2.34	Transplant protocol	Ongoing Current	FY 2007	FY 2010	Arizona Department of Game and Fish, U.S. Fish and Wildlife Service, Sonoran Pronghorn Recovery Team	Work type not yet selected	Labor type not yet selected	cost estimates included in task 2.31
Sonoran pronghorn (Antilocapra americana sonoriensis)	2	2.411	Monitoring - acceptable levels of loss/mgmt steps	Not Started			Arizona Department of Game and Fish, U.S. Fish and Wildlife Service, Sonoran Pronghorn Recovery Team	Work type not yet selected	Labor type not yet selected	cost estimates included in task 2.413

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Sonoran pronghorn (Antilocapra americana sonoriensis)	2	2.412	Monitoring - mgmt steps for expected/unexpected threats	Not Started			Arizona Department of Game and Fish, U.S. Fish and Wildlife Service, Sonoran Pronghorn Recovery Team	Work type not yet selected	Labor type not yet selected	cost estimates included in task 2.413
Sonoran pronghorn (Antilocapra americana sonoriensis)	2	2.413	Monitoring - behavior and habitat use	Not Started			Arizona Department of Game and Fish, U.S. Fish and Wildlife Service, Bureau Land Management , Sonoran Pronghorn Recovery Team	Work type not yet selected	Labor type not yet selected	
Sonoran pronghorn (Antilocapra americana sonoriensis)	3	3.1	Aerial surveys in U.S. and Mexico	Ongoing Current	FY 2000 - FY 2004	FY 2016	Arizona Department of Game and Fish, National Park Service, U.S. Fish and Wildlife Service, United States Air Force , United States Marine Corps , Sonoran Pronghorn Recovery Team	Work type not yet selected	Labor type not yet selected	
Sonoran pronghorn (Antilocapra americana sonoriensis)	3	3.2	Infrared aerial surveys	Not Started			Arizona Department of Game and Fish, National Park Service, U.S. Fish and Wildlife Service, Bureau Land Management , United States Air Force , United States Marine Corps	Work type not yet selected	Labor type not yet selected	results inconclusive; current technology inadequate
Sonoran pronghorn (Antilocapra americana sonoriensis)	3	3.3	Other surveys - U.S. and Mexico	Not Started			Arizona Department of Game and Fish, U.S. Fish and Wildlife Service, Sonoran Pronghorn Recovery Team	Work type not yet selected	Labor type not yet selected	
Sonoran pronghorn (Antilocapra americana sonoriensis)	3	3.4	Continue telemetry tracking and assessment of radiomarking goals, including Mexico	Ongoing Current	FY 2000 - FY 2004	FY 2016	Arizona Department of Game and Fish, Sonoran Pronghorn Recovery Team	Work type not yet selected	Labor type not yet selected	

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Sonoran pronghorn (Antilocapra americana sonoriensis)	3	3.5	Recruitment	Not Started			Arizona Department of Game and Fish, U.S. Fish and Wildlife Service	Work type not yet selected	Labor type not yet selected	
Sonoran pronghorn (Antilocapra americana sonoriensis)	3	4.1	Evaluate taxonomic specimens	Not Started			Arizona Department of Game and Fish, National Park Service, U.S. Fish and Wildlife Service, Bureau Land Management , United States Air Force , United States Marine Corps	Work type not yet selected	Labor type not yet selected	this is a lower priority than other priority 3 actions
Sonoran pronghorn (Antilocapra americana sonoriensis)	3	4.2	Documentation of subspecies differentiation	Not Started			Arizona Department of Game and Fish, Sonoran Pronghorn Recovery Team	Work type not yet selected	Labor type not yet selected	cost estimates included in task 4.1; this is a lower priority than other priority 3 actions
Sonoran pronghorn (Antilocapra americana sonoriensis)	3	4.3	Additional information needs on taxonomic status	Not Started			Arizona Department of Game and Fish, Sonoran Pronghorn Recovery Team	Work type not yet selected	Labor type not yet selected	cost estimates included in task 4.1; this is a lower priority than other priority 3 actions